

CLAIMS

What is claimed and desired to be covered by Letters Patent is:

1. A scaffold support adapted for use on a roof comprising:
  - a) a roof-engaging base unit which includes
    - (1) a plurality of arms, each arm having
      - (A) a first end,
      - (B) a second end,
      - (C) a longitudinal axis extending between the first end and the second end,
      - (D) a first side,
      - (E) a second side,
      - (F) a transverse axis extending between the first side and the second side,
      - (G) a first surface,
      - (H) a second surface,
      - (I) a thickness extending between the first side and the second side,
      - (J) a first pivot pin-accommodating hole defined therethrough adjacent to the first end, and
      - (K) a second pivot pin-accommodating hole

defined therethrough adjacent to the second end;

(2) a first pivot pin extending through the second pivot pin-accommodating hole in a first arm and through the second pivot pin-accommodating hole in a second arm and pivotally connecting the first arm to the second arm with the first surface of the first arm slidingly engaging the second surface of the second arm adjacent to the first end of the first arm and adjacent to the first end of the second arm, the first arm being pivotally movable with respect to the second arm in the direction of the transverse axis of the first arm,

(3) a second pivot pin extending through the second pivot-pin accommodating hole in a third arm and through the second pivot pin-accommodating hole in a fourth arm and pivotally connecting the third arm to the fourth arm with the second surface of the third arm slidingly engaging the first surface of the fourth arm adjacent to the first end of the third arm and adjacent to

the first end of the fourth arm, the third arm being pivotally movable with respect to the fourth arm in the direction of the transverse axis of the third arm, and

(4) a plurality of crossbrace elements connecting

the first and third arms together and

connecting the second and fourth arms

together, each crossbrace element including

(A) a first end fixed to the second side of

an associated arm,

(B) a second end fixed to the second side of

another associated arm,

(C) a longitudinal axis extending between the

first end of each crossbrace element and

the second end of each crossbrace

element,

(D) a first side,

(E) a second side, the second side of each

crossbrace element being spaced apart

from the first side of an adjacent

crossbrace element,

(F) a transverse axis extending between the

first side of each crossbrace element

and the second side of each crossbrace

element,

(G) a first surface, the first surface of each crossbrace element being located adjacent to the second surface of the associated arm,

(H) a second surface, and

(I) a thickness which extends between the first surface of each crossbrace element and the second surface of each crossbrace element;

b) a scaffold-engaging unit which includes

(1) a plurality of support arms, each support arm

having

(A) a first end,

(B) a second end,

(C) a longitudinal axis extending between the first end of each support arm and the second end of each support arm,

(D) a first side,

(E) a second side,

(F) a transverse axis extending between the first side of each support arm and the second side of each support arm,

(G) a first surface,

- (H) a second surface,
- (I) a thickness extending between the first surface of each support arm and the second surface of each support arm,
- (J) a pivot pin-accommodating hole defined through each support arm adjacent to the first end of each support arm, and
- (K) a plurality of fastener-accommodating holes defined through each support arm, the fastener-accommodating holes being spaced apart from each other in the direction of the longitudinal axis of each support arm, one fastener-accommodating hole being located adjacent to the second end of each support arm,

(2) a pivot pin extending through the pivot pin-accommodating hole defined in each support arm and through the first pivot pin-accommodating hole defined in each arm of said roof-engaging base unit and pivotally connecting each support arm of said engaging unit to an associated arm of said roof-engaging base unit with the second

surface of each support arm of said scaffold-engaging unit slidably engaging the first surface of the associated arm of said roof-engaging base unit,

- (3) a first fastener extending through one of the fastener-accommodating holes in a first support arm and through one of the fastener-engaging holes in a second support arm and attaching the first support arm to the second support arm with the first surface of the first support arm abutting the second surface of the second support arm, and
- (4) a second fastener extending through one of the fastener-accommodating holes in a third support arm and through one of the fastener-engaging holes in a fourth support arm and attaching the third support arm to the fourth support arm with the second surface of the third support arm abutting the first surface of the fourth support arm;

c) a first scaffold-engaging crossbar element mounted on the first sides of the first and third support arms and including

- (1) a first end located adjacent to the second

surface of the first support arm,

(2) a second end located adjacent to the first surface of the third support arm,

(3) a longitudinal axis extending between the first end of said first scaffold-engaging cross bar element and the second end of said first scaffold-engaging cross bar element,

(4) a first side,

(5) a second side,

(6) a transverse axis extending between the first side of said first scaffold-engaging cross bar element and the second side of said first scaffold-engaging cross bar element,

(7) a first surface,

(8) a second surface which abuttingly engages the first sides of the first and third support arms, and

(9) a thickness extending between the first side of said first scaffold-engaging cross bar element and the second side of said first scaffold-engaging cross bar element;

d) a second scaffold-engaging crossbar element mounted on the first sides of the second and fourth support arms and including

- (1) a first end located adjacent to the second surface of the second support arm,
- (2) a second end located adjacent to the first surface of the fourth support arm,
- (3) a longitudinal axis extending between the first end of said second scaffold-engaging cross bar element and the second end of said second scaffold-engaging cross bar element,
- (4) a first side,
- (5) a second side,
- (6) a transverse axis extending between the first side of said second scaffold-engaging cross bar element and the second side of said second scaffold-engaging cross bar element,
- (7) a first surface,
- (8) a second surface which abuttingly engages the first sides of the second and fourth support arms, and
- (9) a thickness extending between the first side of said second scaffold-engaging cross bar element and the second side of said second scaffold-engaging cross bar element;

e) a plurality of U-shaped bracket elements fixed to the second surface of each scaffold-engaging cross

bar element, each bracket element including

- (1) a bight section fixed to an associated scaffold-engaging cross brace element,
- (2) two legs extending from the bight section,
- (3) a fastener-accommodating hole defined through each leg of each bracket element, the fastener-accommodating holes in each leg of each bracket being aligned with each other and adapted to be aligned with one of the fastener-accommodating holes in each support arm of said scaffold-engaging unit, and
- (4) a fastener extending through the fastener-accommodating holes in each bracket element and through the one fastener-accommodating hole in each support arm of said scaffold-engaging unit; and

f) a stabilizing unit attached to said roof-engaging base unit and including

- (1) a base element having a proximal end, a distal end, a longitudinal axis extending between the proximal end and the distal end, a first side, a second side, a transverse axis extending between the first side of the base element of said stabilizing unit and the

second side of the base element of said stabilizing unit, a first surface, a second surface, and a mounting fastener-accommodating hole defined through the base element adjacent to the distal end of the base element, the second surface of the base element of said stabilizing unit being adapted to engage a surface of a roof when said stabilizing unit is in use,

(2) an attachment bracket unit on the first end of the base unit of said stabilizing unit, the attachment bracket having

(A) a triangular body having an apex, a base, two sides, a first surface, a second surface, the first surface of the triangular body being located adjacent to the first surface of the base element of said stabilizing unit,

(B) a wing element on each side adjacent to an intersection of each side and the base, each wing element extending from the triangular body towards the distal end of the base element of said stabilizing unit in the direction of the

longitudinal axis of the base element of  
said stabilizing unit and having a  
fastener-accommodating hole defined  
therethrough,

- (C) a pivot pin extending through the holes  
on each wing element in the direction of  
the transverse axis of the base element  
of said stabilizing unit,
- (D) a sheath surrounding the pivot pin of  
said stabilizing unit, the sheath being  
fixed to the proximal end of the base  
element of said stabilizing unit, the  
base element of said stabilizing unit  
being pivotally attached to the  
triangular body via the pivot pin and  
the sheath,
- (E) a U-shaped fastening bracket on the apex  
of the triangular body and including a  
bight portion having a fastener-  
accommodating hole defined therethrough,  
two legs, a fastener-accommodating hole  
defined through each leg,
- (F) the second pivot pin of said roof-  
engaging base unit extending through the

fastener-accommodating hole of the U-shaped fastening bracket on the apex of the triangular body and fixing the U-shaped fastening bracket to said roof-engaging base unit,

(G) a fastener extending through the fastener-accommodating holes defined in the legs of the U-shaped fastening bracket,

(3) a U-shaped mounting bracket on the first surface of the base element of said stabilizing unit, the mounting bracket being located adjacent to the distal end of the base element of said stabilizing unit and including two legs with each leg having a fastener-accommodating hole defined therethrough, the fastener-accommodating holes in the mounting bracket being aligned with each other,

(4) a fastener rotatably mounted in the fastener-accommodating holes in the U-shaped mounting bracket on the first surface of the base element of said stabilizing unit and extending in the direction of the transverse

axis of the base element of said stabilizing unit, and

(5) a turnbuckle element having a first end attached to the fastener extending through the fastener-accommodating holes defined in the legs of the U-shaped fastening bracket and a second end attached to the fastener rotatably mounted in the fastener-accommodating holes in the U-shaped mounting bracket on the first surface of the base element of said stabilizing unit.

2. A scaffold support adapted for use on a roof

comprising:

- a) a roof-engaging base unit having two sections and a pivot connection between the two sections;
- b) a scaffold-engaging unit having a plurality of legs each pivotally attached to said roof-engaging base unit and being releasably attached together in pairs, each leg having a plurality of fastener-accommodating holes defined therethrough and a fastener attaching one leg to an associated leg;
- c) two scaffold-engaging crossbar elements mounted on the legs of said scaffold-engaging unit; and

d) a stabilizing unit releasably and pivotally attached to said roof-engaging base unit and including a turnbuckle element.